

## ABSTRACT:

In a transmitting node (3) in a transmission system, a plurality of source signals are multiplexed by a multiplexer (34) into a multiplex signal. The multiplex signal is transmitted to a receiving node (5) where it is demultiplexed in the source signals.

The multiplex signal comprises a plurality of packets having a flag field, a length field, a connection ID field and a data field. The flag field can be present to enable the receiver to find the beginning of the packet or to carry non-urgent control signals.

According to the present invention, the length of the flag field is dependent on the aggregate bitrate of the source signals, making it possible that more source signals can be transmitted over the transmission link under heavy traffic conditions.

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a ~~Fig. 4~~